

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Energy Storage Battery-AGM-GEL Technology-TNG Series

TNG12-24

(12V 24Ah)

GENERAL FEATURES

- ◆ Oxygen recombination technology: maintenance-free, no need to add water or acid
- ◆ The patent grid alloy: less gassing, low self-discharge, excellent corrosion resistance
- ◆ Special paste formula: additives for deep discharge, long cycle life
- ◆ High quality AGM separator: extend cycle life and prevent micro short circuit
- ◆ The patent Nano silica electrolytes, extend cycle life and improve the deep discharge performance
- ◆ ABS container: increase the strength of battery (Flame-retardant ABS UL94-V0 is optional)



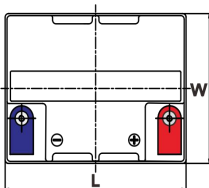
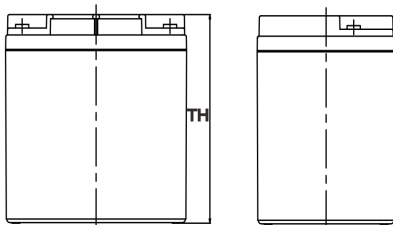
Application

- ◆ Renewable energy system
- ◆ Hybrid solar power system
- ◆ Uninterrupted Power Supply (UPS)
- ◆ Communications and electric equipment
- ◆ Emergency lighting equipment
- ◆ Fire alarm and security systems
- ◆ Robots, control equipment, and other factory automation equipment
- ◆ Emergency power supply (EPS)
- ◆ Various power toy and hobby equipment
- ◆ Lighting equipment

Dimension

Unit:mm

Length	166±2mm / 6.54inch
Width	125±2mm / 4.92inch
Container Height	175±3mm / 6.89inch
Total Height	175±3mm / 6.89inch



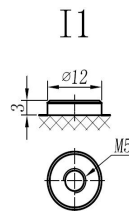
Terminal

Unit:mm

Terminal Type: I1

Weight

9.8kg 21.61lbs



This document is subject to change without prior notification

Motive Battery

Energy Storage Battery



Reserve Battery

Motorcycle Battery

TNG12-24

Specification

Nominal Voltage	12V	
	24.5Ah	20hr Rate(1.80V/cell)
	22.32Ah	10hr Rate(1.80V/cell)
Rated Capacity(25°C)	20.4Ah	5hr Rate(1.75V/cell)
	18.87Ah	3hr Rate(1.70V/cell)
	15.07Ah	1hr Rate(1.60V/cell)
Container Material	ABS (Flame-retardant ABS UL94-V0 is optional)	
Operating Temperature Range	Discharge	-20 ~ +50°C
	Charge	0 ~ +40°C
	Storage	-15 ~ +40°C
Capacity Effected by Temperature	40°C / 104°F	106%
	25°C / 77°F	100%
	0°C / 32°F	86%
	-10°C / 14°F	65%
Charge Voltage	Float Voltage	2.25 -2.30V/cell@25°C, Tem. Coefficient: -3mV/cell/°C
	Equalize Voltage	2.35 -2.40V/cell@25°C, Tem. Coefficient: -3mV/cell/°C
	Cycle Voltage	2.40 -2.50V/cell@25°C, Tem. Coefficient: -5mV/cell/°C
Max Charging Current	7.2A (0.3C)	
Max. Discharge Current (5S)	360A	
Internal Resistance	15mΩ	
Self Discharge	<3%, TN series stored at 25 °C require a supplementary charge every six months, the charging interval would shrink when the ambient temperature went higher	

Discharge Performance

Constant Current Discharge Table (25°C/77°F) Unit: A

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	44.8	34.4	28.5	24.6	19.0	14.2	12.07	7.14	5.58	4.54	3.70	3.21	2.59	2.16	1.215
1.80V/cell	60.1	43.9	34.4	29.1	22.5	16.6	13.52	7.79	6.01	4.85	3.97	3.45	2.75	2.23	1.225
1.75V/cell	67.9	48.4	37.7	31.4	23.3	17.2	14.14	8.08	6.12	4.96	4.08	3.54	2.80	2.29	1.235
1.70V/cell	74.8	52.7	40.2	33.0	24.3	17.9	14.59	8.28	6.29	5.09	4.18	3.61	2.84	2.34	1.256
1.65V/cell	82.4	56.9	42.8	35.0	25.6	18.3	14.93	8.40	6.56	5.26	4.30	3.69	2.88	2.39	1.276
1.60V/cell	90.8	61.7	45.7	37.3	27.1	19.1	15.07	8.76	6.76	5.43	4.44	3.77	2.91	2.41	1.286

Constant Power Discharge Table (25°C/77°F) Unit: W

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	82.0	63.6	53.3	46.5	36.3	27.0	22.97	13.71	10.75	8.76	7.16	6.26	5.07	4.28	2.350
1.80V/cell	108.9	80.3	63.5	54.2	42.2	31.2	25.54	14.79	11.44	9.30	7.65	6.69	5.36	4.41	2.370
1.75V/cell	120.2	86.8	68.5	57.7	43.5	32.0	26.62	15.28	11.63	9.47	7.82	6.85	5.44	4.52	2.390
1.70V/cell	128.6	92.5	72.0	60.1	45.0	33.2	27.41	15.68	11.93	9.70	8.01	6.98	5.51	4.61	2.440
1.65V/cell	139.8	98.9	76.0	63.5	47.1	33.7	27.80	15.78	12.42	9.96	8.20	7.12	5.59	4.70	2.470
1.60V/cell	150.7	105.0	79.9	66.8	49.3	34.9	27.90	16.37	12.72	10.25	8.44	7.24	5.63	4.74	2.480

☐ 动力电池

■ 储能电池

☐ 备用电池

☐ 摩托车电池



储能电池-AGM-凝胶技术-TNG系列

TNG12-24

(12V 24Ah)

产品特点

- ◆ 阀控式免维护设计，寿命期间无需加水或加酸
- ◆ 专利稀土合金板栅，减少气体产生，自放电率低，抗腐蚀能力出众
- ◆ 特制组成配方，添加特殊试剂，增进深放电性能，延长循环寿命
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ 纳米硅胶专利电解质，延长循环寿命，增进深放电性能
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）



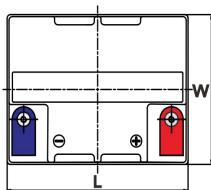
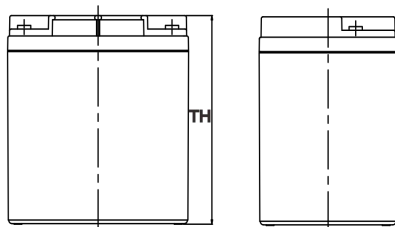
产品应用

- ◆ 可再生能源系统
- ◆ 太阳能混合动力系统
- ◆ 不间断电源 (UPS)
- ◆ 通信及电力设备
- ◆ 应急照明系统
- ◆ 安防及火灾报警系统
- ◆ 机械自动化控制设备
- ◆ 应急电源 (EPS)
- ◆ 各式电动玩具及娱乐设施
- ◆ 照明设备

尺寸

单个尺寸

长	166±2mm / 6.54inch
宽	125±2mm / 4.92inch
高	175±3mm / 6.89inch
总高	175±3mm / 6.89inch



端子类型

单位:mm

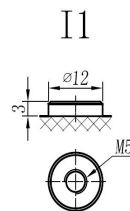
端子类型

I1

重量

9.8kg

21.61lbs



内容如有改动，恕不另行通知

动力电池 储能电池 备用电池 摩托车电池

规格书

TNG12-24

额定电压	12V
容量(25°C)	24.5Ah 20hr Rate(1.80V/cell)
	22.32Ah 10hr Rate(1.80V/cell)
	20.4Ah 5hr Rate(1.75V/cell)
	18.87Ah 3hr Rate(1.70V/cell)
	15.07Ah 1hr Rate(1.60V/cell)
壳体材料	ABS (阻燃ABS壳体可选)
使用温度范围	放电 -20 ~ +50°C
	充电 0 ~ +40°C
	储存 -15 ~ +40°C
不同温度下电 池容量系数	40°C / 104°F 106%
	25°C / 77°F 100%
	0°C / 32°F 86%
	-10°C / 14°F 65%
充电电压	浮充 2.25 -2.30V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	均充 2.35 -2.40V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	循环使用 2.40 -2.50V/单格@25°C, 温度补偿系数: -5mV/单格/°C
最大充电电流	7.2A (0.3C)
最大放电电流(5S)	360A
电阻	15mΩ
自放电	<3%, TN系列储存在25°C时需每6个月进行一次补充充电, 环境温度更高时则充电间隔时间越短

放电性能

恒电流放电表 (25°C/77°F) 单位: A															
F. V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	44.8	34.4	28.5	24.6	19.0	14.2	12.07	7.14	5.58	4.54	3.70	3.21	2.59	2.16	1.215
1.80V/cell	60.1	43.9	34.4	29.1	22.5	16.6	13.52	7.79	6.01	4.85	3.97	3.45	2.75	2.23	1.225
1.75V/cell	67.9	48.4	37.7	31.4	23.3	17.2	14.14	8.08	6.12	4.96	4.08	3.54	2.80	2.29	1.235
1.70V/cell	74.8	52.7	40.2	33.0	24.3	17.9	14.59	8.28	6.29	5.09	4.18	3.61	2.84	2.34	1.256
1.65V/cell	82.4	56.9	42.8	35.0	25.6	18.3	14.93	8.40	6.56	5.26	4.30	3.69	2.88	2.39	1.276
1.60V/cell	90.8	61.7	45.7	37.3	27.1	19.1	15.07	8.76	6.76	5.43	4.44	3.77	2.91	2.41	1.286

恒功率放电表 (25°C/77°F) 单位: W															
F. V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	82.0	63.6	53.3	46.5	36.3	27.0	22.97	13.71	10.75	8.76	7.16	6.26	5.07	4.28	2.350
1.80V/cell	108.9	80.3	63.5	54.2	42.2	31.2	25.54	14.79	11.44	9.30	7.65	6.69	5.36	4.41	2.370
1.75V/cell	120.2	86.8	68.5	57.7	43.5	32.0	26.62	15.28	11.63	9.47	7.82	6.85	5.44	4.52	2.390
1.70V/cell	128.6	92.5	72.0	60.1	45.0	33.2	27.41	15.68	11.93	9.70	8.01	6.98	5.51	4.61	2.440
1.65V/cell	139.8	98.9	76.0	63.5	47.1	33.7	27.80	15.78	12.42	9.96	8.20	7.12	5.59	4.70	2.470
1.60V/cell	150.7	105.0	79.9	66.8	49.3	34.9	27.90	16.37	12.72	10.25	8.44	7.24	5.63	4.74	2.480